The PE spacer 10 thus obtained had ten trapezoidal grooves of 2.4 mm groove depth, 2.4 mm outer groove width, and 1.2 mm inner groove width positioned at equal intervals in the circumferential direction. These grooves had a spiral structure, which was twisted in SZ-form at an inversion pitch of 230mm and an inversion angle of 250°. The minimum rib thickness of the ribs 15 at the rib root was approximately 0.8 mm. The PE spacer 10 obtained thus had the targeted dimensions and shapes and satisfied the various specifications.

ABSTRACT AMENDMENTS

Amend the abstract found on the last page of the specification as filed as indicated below by underlining, strikeouts, or double bracketing. A cleanly typed substitute abstract is submitted on the following separate page.

Abstract

In applying an intermediate coating layer of thermoplastic resin onto the periphery of a central tensile member and applying a main coating of polyethylene resin, having continuous spiral grooves that are for accommodating optical fibers and are inverted periodically in direction along the length direction, onto the outer periphery of the abovementioned intermediate coating layer, a cooling medium is

blown or made to flow with priority onto the grooves after melt discharge to form a spacer with which even though the A polyethylene spacer for optical fiber cable including a central tensile member, an intermediate coating layer arranged on an outer periphery of the central tensile member and being compatible with polyethylene and a main coating arranged on an outer periphery of the intermediate coating layer and having continuous spiral grooves for accommodating optical fibers and which are inverted periodically in a lengthwise direction. The main coating is formed from polyethylene resin. The spacer includes ribs defining the spiral grooves. A minimum [[rib]] thickness of the ribs that define the abovementioned spiral grooves is 1.0 mm or less, the groove inclination angle α of the spacer α cross section of the spacer at [[the]] inversion parts is α or less. A resin density of a root part of each rib is the lowest in comparison to a resin density at a tip part of the rib and central parts of the rib between the root part and the tip part.

Abstract

A polyethylene spacer for optical fiber cable including a central tensile member, an intermediate coating layer arranged on an outer periphery of the central tensile member and being compatible with polyethylene and a main coating arranged on an outer periphery of the intermediate coating layer and having continuous spiral grooves for accommodating optical fibers and which are inverted periodically in a lengthwise direction. The main coating is formed from polyethylene resin. The spacer includes ribs defining the spiral grooves. A minimum thickness of the ribs is 1.0 mm or less, the groove inclination angle α of a cross section of the spacer at inversion parts is 18° or less. A resin density of a root part of each rib is the lowest in comparison to a resin density at a tip part of the rib and central parts of the rib between the root part and the tip part.